



Innovation sources of knowledge for clustering standardized field of creativity¹

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Abstract: This paper presents a comparative analysis of global (ISO/IEC) and local (SRPS) knowledge sources in PDCA loop quality, with the ability to monitor innovation intensity in the standardized fields of creativity. The study refers to standardized fields of the first level of International Classification Standards (ICS1) grouped in clusters of innovation. The paper focuses on the latest trends in the knowledge sources, and trend lines of certain standardized field of higher (daily) intensity of innovation in the fields of technics and informatics: ICS1 = 25 Manufacturing engineering and ICS1 = 35 Information technologies. The aim is to monitor the intensity of knowledge innovation, trends, sources of knowledge by innovation clusters and update the knowledge base for quality improvement (on standardization platform).

Keywords: knowledge sources; knowledge base (KB); trend; cluster innovation; standardization

1. INTRODUCTION

Knowledge in education process often requires significant expenses. Therefore, establishing the mechanism or model of knowledge which will be applied in complex processes bears particular significance. However, the observation and implementation of international (ISO/IEC, [1]) and local standards (SRPS, [2]) are necessary both in education and business processes. Creation of *Knowledge Base (KB)* provides automation solutions to the problem. *Knowledge* modelling forges a path towards the desired Information-Expert System (IES) in the PDCA *quality loop* [3]. The availability and access to knowledge sources provide more reliable basis for efficient development activities of knowledge base system, as in [4]. EFQM excellence model [5] offers an adequate frame for creation and analysis of the model for conducting *knowledge* management.

The starting point for monitoring *Knowledge Sources* Innovation is archiving information on quantity and value of the *Knowledge Sources (KS)* in all fields of creativity at the first level of (ICS1) classification. As in the paper [6] in which the clustering method was applied in one standardized field, this paper shows all fields at the first classification level (ICS1). Grouping into clusters was realized according to innovation intensity of knowledge sources.

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